

CLAIMS

What is claimed is:

1. A data processing device having a first operational mode and a second operational mode, the data processing device comprising:
 - a plurality of control elements to perform a first plurality of defined functions when the data processing device is in the first operational mode and to perform a second plurality of defined function when the data processing device is in the second operational mode,
 - wherein the first operational mode is associated with a first physical orientation of the data processing device and the plurality of control elements and the second operational mode is associated with a second physical orientation of the data processing device and the plurality of control elements.
2. The data processing device as in claim 1 further comprising:
 - a display having a viewable display screen for rendering images generated by the data processing device, the display screen rendering images in a first orientation when the data processing device is in the first operational mode and rendering images in a second orientation when the data processing device is in the second operational mode.
3. The data processing device as in claim 1 wherein one or more of the control elements comprise:
 - a first glyph representing a designated one of the first specified functions, the first glyph being highlighted when the data processing device is in the first operational mode; and

a second glyph representing a designated one of the second specified functions, the first glyph being highlighted when the data processing device is in the first operational mode.

4. The data processing device as in claim 3 wherein each of the first glyphs are positioned on each of the control elements in a first orientation corresponding to the first orientation of the data processing device and each of the second glyphs are positioned on each of the control elements in a second orientation corresponding to the second orientation of the data processing device.

5. The data processing device as in claim 4 wherein the first orientation is rotated 90 degrees relative to the second orientation.

6. The data processing device as in claim 3 wherein the first operational mode comprises a data entry mode and wherein the second operational mode comprises a telephony mode wherein the data processing device performs telephony-based functions.

7. The data processing device as in claim 6 wherein, when in the telephony mode, the second specified function for a group of the control elements is that of a numeric keyboard for entering telephone numbers.

8. The data processing device as in claim 7 wherein, when in the data entry mode, the first specified function for a group of the control elements is that of a cursor control keypad.

9. The data processing device as in claim 1 wherein the plurality of control elements includes a control wheel for moving a graphical cursor element when rotated in either the first operational mode and/or the second operational mode.

10. The data processing apparatus as in claim 9 wherein the plurality of control elements includes a plurality of keys and/or buttons.

11. A data processing apparatus having a first operational mode and a second operational mode comprising:

a first group of control elements to perform a first predefined set of functions in a first orientation associated with the first operational mode and to perform a second predefined set of functions in a second orientation associated with the second operational mode; and

a display to render images having a first image orientation associated with the first operational mode and to render images having a second image orientation associated with the second operational mode.

12. The data processing apparatus as in claim 11 wherein the first image orientation is rotated plus or minus 90 degrees with respect to the second image orientation.

13. The data processing apparatus as in claim 11 wherein the first orientation of the first group of control elements is rotated plus or minus 90 degrees with respect to the second orientation of the first group of control elements.

14. The data processing apparatus as in claim 11 further comprising:
a second group of control elements to perform a third predefined set of functions in a first orientation associated with the first operational mode and to perform a fourth predefined set of functions in a second orientation associated with the second operational mode.

15. The data processing apparatus as in claim 14 wherein the display is configured on the data processing apparatus between the first group of control elements and the second group of control elements.

16. The data processing apparatus as in claim 14 wherein the display is rotatably coupled to the data processing apparatus to rotate from a first position in which it is positioned between the first group of control elements and the second group of control elements to a second position in which it exposes a third group of control elements positioned between the first group of control elements and the second group of control elements.

17. The data processing apparatus as in claim 11 wherein the display is rotatably coupled to the data processing apparatus to rotate from a first position in which it covers a third group of control elements to a second position in which it exposes the third group of control elements.

18. The data processing apparatus as in claim 17 wherein the third group of control elements comprise an alphanumeric keyboard.

19. The data processing apparatus as in claim 11 wherein one or more of the first group of control elements comprise:

a first glyph having a first glyph orientation associated with the first orientation; and

a second glyph having a second glyph orientation associated with the second orientation.

20. The data processing apparatus as in claim 19 wherein the first glyph orientation is rotated plus or minus 90 degrees with respect to the second glyph orientation.

21. The data processing apparatus as in claim 19 wherein the data processing device highlights the first glyph when in the first operational mode and highlights the second glyph when in the second operational mode.

22. The data processing apparatus as in claim 19 wherein the second operational mode is a telephony mode and wherein, when in the telephony mode, the first group of control elements comprise a numeric keypad, and wherein the second glyphs represent numbers of the numeric keypad.

23. A data processing device having a data entry mode and a telephony mode comprising:

a first group of control elements to perform data entry functions within a first physical orientation when the data processing device is in the data entry mode and to perform numeric telephony keypad functions within a second physical orientation when the data processing device is in the telephony mode.

24. The data processing device as in claim 23 further comprising:
a display to render images having a first image orientation associated with the data entry mode and to render images having a second image orientation associated with the telephony mode.

25. The data processing apparatus as in claim 24 wherein the first image orientation is rotated plus or minus 90 degrees with respect to the second image orientation.

26. The data processing apparatus as in claim 23 wherein the first physical orientation is rotated plus or minus 90 degrees with respect to the second physical orientation.

27. The data processing device as in claim 23 wherein the first group of control elements include a first group of glyphs representing the data entry functions and a second group of glyphs representing numbers of the numeric telephony keypad.

28. The data processing device as in claim 27 wherein the data processing device highlights the first group of glyphs when in the data entry mode and highlights the second group of glyphs when in the telephony mode.